

POWERED BY **Dialog**

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**PATENT FAMILY:**

**Japan (JP)**

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(全 3 頁)

コネクタ

8

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# ⑦実用新案登録請求の範囲

プラグモールドに複数のプラグピンを挿通挿設してなるプラグを、該各プラグピン下方突出部を基板の孔に挿通させ半田付けして取付け、且つ該各プラグピン上方突出部にソケットを導通させて取付けてなるコネクタにおいて、該複数のプラグピンのうち少なくとも一のプラグピンの下方突出部を該複数のプラグピンの整列方向にへの字状の大傾斜折曲縁が上方となるよう略該への字形に折曲形成した係合部を設け、該係合部を上記基板の孔に挿通係合させる構成としてなるコネクタ。

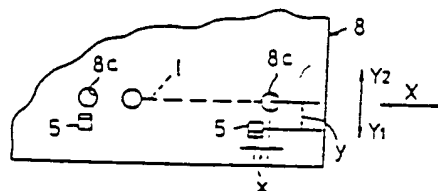
図面の簡単な説明

第1図はコネクタの従来例及び基板の分解斜視図、第2図及び第3図は夫々コネクタの他の従来

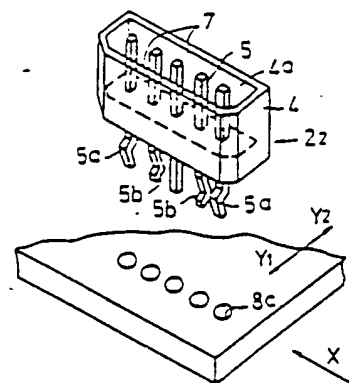
例のプラグ及び基板の分解斜視図、及び基板の平面図、第4図A～Cは夫々本考案になるコネクタの1実施例のプラグの平面図、正面図及び縦断側面図、第5図は上記プラグを取付ける基板の平面図、第6図A～Cは夫々上記コネクタの他の実施例のプラグの平面図、正面図及び縦断面図である。

1…コネクタ、2<sub>1</sub>、2<sub>2</sub>、1<sub>1</sub>、2<sub>1</sub>…プラグ、3…ソケット、4<sub>b</sub>…係合アーム、5、1<sub>3</sub>、2<sub>3</sub>…プラグピン、5<sub>a</sub>、5<sub>b</sub>…くの字係合部、6<sub>a</sub>、8<sub>a</sub>、8<sub>c</sub>…孔、8…基板、1<sub>3</sub><sub>a</sub>、1<sub>3</sub><sub>b</sub>、2<sub>3</sub><sub>a</sub>、2<sub>3</sub><sub>b</sub>…への字係合部、1<sub>4</sub><sub>a</sub>、1<sub>4</sub><sub>b</sub>…折曲縁部、2<sub>2</sub><sub>b</sub>…モールド一側面、2<sub>3</sub><sub>c</sub>…折曲ピン部。

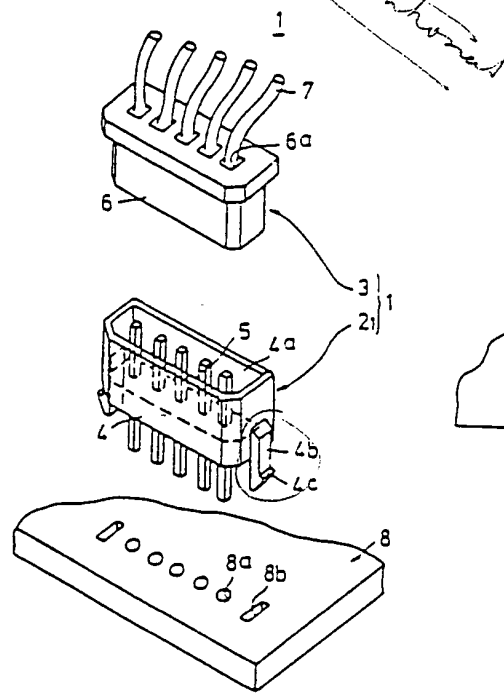
第3図



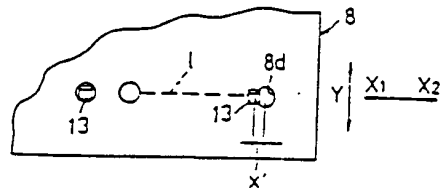
第2図



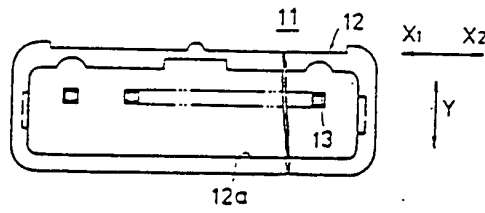
第1図



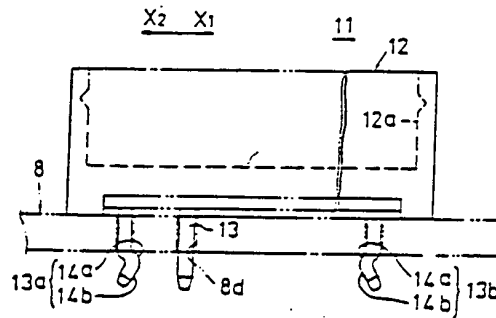
第5図



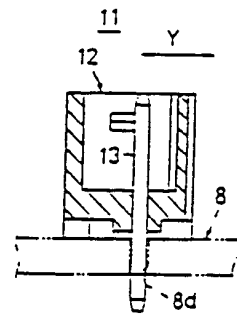
第4図 (A)



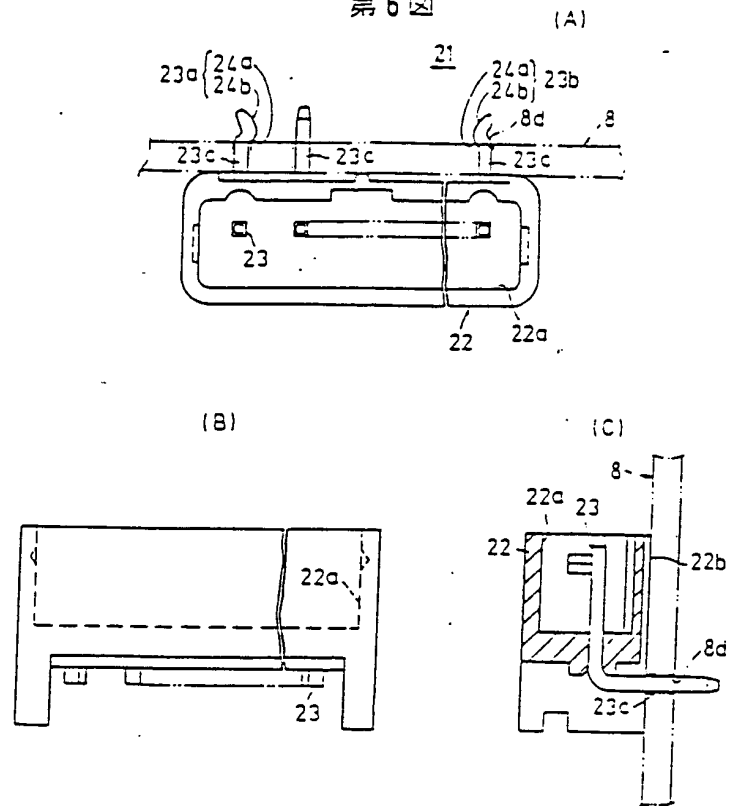
(B)



(C)



第6図



JAPANESE PATENT OFFICE  
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(51) TITLE: Connector

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(71) Applicant: Mitsumishin-chi KK (Mitsumishin-chi Corp.)

(74) Representative: Attorney at Law: Tadahiko Ito

(57) Claims

This invention comprises multiple plug pins inserted and installed within a plug mold, suitably each plug pin's lower projecting section being protruded and pushed through a receptive hole on the printed circuit board and soldered, yet the upper projecting portion of each plug pin protruding through a socket, and the connection part is located in such a manner that the lower projecting part of at least one of the plug pins is bent upward at an obtuse angle in the direction of the multiple plug pin array, and these connection parts are inserted into the receptive holes in the printed circuit board.

Detailed Explanation of the Figures:

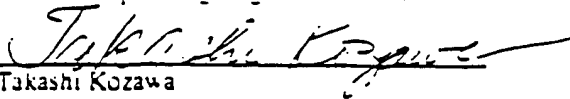
Figure 1 is an example of a conventional connector and an isometric exploded view of printed circuit board. Figure 2 and Figure 3 are respectively an exploded three dimensional view of a conventional plug and printed circuit board and a plan view of the printed circuit board. Figure 4A through C are plan, front and cross sectional views of an example of this invention. Figure 5 illustrates the plan view of the printed circuit board with the aforementioned connector installed, and Figure 6 A through C are plan, front and cross sectional views of a plug that is another example of the aforementioned connector.

- 1 ..... Connector
- 21, 22, 11, 21 ..... Plug.
- 3 ..... Socket
- 4b ..... Latch arm
- 5, 13, 23 ..... Plug pin
- 5a, 5b ..... Connection part with obtuse angle
- 6a, 8a, 8c ..... Holes
- 8 ..... Printed circuit board
- 13a, 13b, 23a, 23b ..... Connection part with upward bent obtuse angle
- 14a, 14b ..... Edge of the Bent portion
- 22b ..... One side of mold
- 23c ..... Bent Pin Portion.

Mitsumishin

CERTIFICATE OF TRANSLATION

This is to certify that the foregoing translation from Japanese to English was made under my personal supervision by a qualified translator conversant with both these languages and that to the best of my knowledge and understanding it is a true and complete rendition of the corresponding original document.



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Subscribed and sworn to before me, a Notary Public in and for Cook County,  
Illinois this 15<sup>th</sup> day of January, 1990.

